



***KHAN arms***

**MATRIX KINE-SYS®**

**INSTRUCTION  
&  
MAINTENANCE MANUAL**

## **CONTENTS**

|   |    |
|---|----|
| Introduction                                | 2  |
| Operation                                   | 2  |
| Safety Rules                                | 3  |
| Assembly                                    | 4  |
| Manual Trigger Safety                       | 5  |
| Loading                                     | 5  |
| Unloading                                   | 6  |
| Disassembly                                 | 6  |
| Removing and Disassembling the Bolt Group   | 7  |
| Removing and Reinstalling the Trigger Group | 8  |
| Assembling and Installing the Bolt Group    | 9  |
| Removing and Reinstalling the Choke Tubes   | 10 |
| Removing the Magazine Plug                  | 10 |
| Maintenance                                 | 11 |
| Choke Tubes Information                     | 12 |
| Technical Drawings and Part Lists           | 13 |

## INTRODUCTION

This instruction and maintenance manual provide important information for assembling and using new firearms. Please read the Owner's Manual carefully before handling the firearms.

Follow safe firearms handling procedure at all times. Get instruction from a competent firearms instructor before using the firearms.

If you have any question mark or doubt about the assembly or the operation of your firearms visit your dealer, or a qualified gunsmith.

Keep this manual, and consult it when needed. If you sell or transfer your firearms, make sure the manual goes with your firearms.

## OPERATING SYSTEM

The **MATRIX Mine-Sys** operation is based on the basic principle of inertia utilizing the kinetic energy created by the projection of the fired cartridge within an unvented barrel. The system requires no outlet for gas or barrel recoil, but operates by means of a spring that is freely interposed between the bolt head and the bolt.

Simply, everything comes from "**F=ma**"..

## BASED ON NEWTON'S SECOND LAW...

Design of a highly respectable competitor, ours is a post patent version, as we believe that everybody has the right to enjoy this system with affordable pricing and high quality...

## BASED ON CONSUMER RIGHTS FIRST LAW...

**Available in 4 main and several sub configurations;**

**X Home defence    X Tactical    X Hunting    X Sporting**

## **Kine-Sys Advantages;**

⇒ User friendly--Will cycle all type of ammo in different loads..

*A simple mechanism with 3 major parts,bolt,intertia spring and rotating ball head!!!*

⇒ Strong-- As there is no gas loss. **Kine-Sys** has better impact on the target

⇒ Cleaning-- **Kine-Sys** products are much cleaner so cleaning process takes a short time.

⇒ Lightweight--THE **Kine-Sys** Matrix and A-tac product are lightweight products as a characteristic.

⇒ Balance --The **Kine-Sys** has many less parts compared to gas operated system semi autos on the barrel side, which brings you better balance.

## **SAFETY RULES**

1. *Always treat all firearms as if they were loaded. Don't rely on the safety. Keep the muzzle pointed in a safe direction at all times.*
  2. *Never cross a fence, climb a tree or jump across a ditch with a loaded firearms. Always carry your firearms so that you can control the direction of the muzzle if you fall or tumble.*
  3. *Never load or carry a loaded firearms until you are ready to use it. Never leave a loaded firearms unattended, or allow a loaded firearms in a building or a vehicle.*
  4. *Watch your muzzle, so that the other person doesn't have to. Never point any gun, loaded or unloaded, at anything you do not intend to shoot.*
  5. *Keep firearms and ammunition separately, and in a storage. Use a trigger lock or cable lock on the gun.*
  6. *Don't shoot unless you are absolutely sure of your target and what is beyond it. Never shoot at hard, flat surfaces or at water.*
  7. *Know the range of your firearms. Shotgun pellets can travel 500 yards, and shotgun slugs have a range of  $1\frac{1}{2}$  mile. Always be sure your backstop, and what lies beyond.*
  8. *Always wear eye and ear protection when shooting. Make sure that people close to you are similarly protected.*
  9. *Always be sure the barrel is clear of any obstruction. Each time you pick up the gun, check the barrel for any possible obstruction. Make sure the barrel is clean, and free of dirt or grease before shooting.*
  10. *Use the right ammunition. Always use clean, dry, original factory-loaded ammunition of the proper type and gauge for your gun. Carry only the proper ammunition for the gun you are shooting. If you are shooting a 12 gauge do not carry 20 gauge ammunition.*
- A firearm is as safe as the person using it. Make sure that each person who handles the firearms has read the owner's manual, and understands and observes safe gun handling procedure.*



**The orange color part between the fore-end and the receiver is packaging purpose only! Not use when assembling.**

## ASSEMBLY

*Mounting the fore-end and the barrel, to the receiver. Make sure the barrel is clean and free off heavy lubrication. Remove the fore-end by unscrewing the fore-end nut. Slide the fore-end off the magazine tube.(Fig.2.)*

*Assemble the fore-end on to the barrel's underside by inserting front part of the fore-end to the barrel's lug(Fig.3.)Now the barrel is ready to assemble to the receiver.*

*While the barrel is ready to assemble, slide the fore-end into the magazine tube and fit it properly to the receiver(Fig.4). Make sure that the fore-end is fitted with the fore-end latch correctly. Screw the fore-end nut on to the front of the magazine tube, finger tight. Close the bolt by pressing the carrier latch button.*



**Fig.1**



**Fig.2**



**Fig.3**



**Fig.4**

## MANUAL TRIGGER SAFETY

Before loading the gun, manual trigger safety is on.(Fig.5)To activate the manual trigger safety, press the manual safety button on the side of the trigger guard from the left side of the gun,to the right.When the trigger safety is "on", the black button will protrude from the left side of the trigger guard,and the red band around the button will be visible.

The manual safety trigger is related only to lock the trigger. It's not suitable for safe gun handling.

## LOADING

Put the manual safety "on"(Fig.5).Pull the trigger guard latch button and make sure there is no shell dropping on the carrier (Fig.6). Push the carrier latch button and release the bolt forward as into close position.(Fig.7)Load cartridges by sliding them forward into the magazine tube, thanks to our easy loading feature depressing the cartridge carrier as you do so (Fig.8)

After loading the magazine tube pull the trigger guard latch button, the cartridge will drop on the carrier.In order to move a cartridge from carrier to the chamber, pull the bolt handle fully to the back, and release it.(Fig.9) The magazine tube holds 2 cartridges when the magazine plug is installed. The magazine tube holds five pieces 3" magnum or four pieces when the plug has been removed. To load an additional cartridge, load one cartridge to the chamber, and then load other cartridges to the magazine tube, and pull to trigger guard latch button (Fig.9) to drop the cartridge from magazine tube to the carrier. When you are ready to fire, put the manual trigger safety in to the "off" position. The gun now is ready to fire.



Fig.5



Fig.6



Fig.7



Fig.8



Fig.9

## UNLOADING

*Fired cartridges will be ejected automatically. To unload the unfired cartridges from the gun, first of all be sure that the safety button is in the "on" position.(Fig.10) Never permit your finger or another object to come in contact with the trigger while unloading.*

*Pull the bolt handle to rear to eject any cartridge in the chamber. If there is a cartridge in the chamber and a cartridge on the carrier, this will also load the cartridge from the carrier, pull and release the bolt handle again.*

*If cartridge remains in the magazine tube, pull the trigger guard latch button to place the cartridge onto the carrier. Pull and release the bolt handle again to load that cartridge to the chamber, than pull it again to eject the cartridge from the chamber. Continue this operation until all the cartridges have been ejected.*

*Always double check to make sure that the firearms are completely unloaded when you are not shooting.*

## DISASSEMBLY

*Unload the gun. Put the manual safety "on". Pull the bolt handle fully to the back and lock the bolt backwards as in bolt open position. Unscrew the fore-end nut and remove it (Fig.11).Slide the fore-end and barrel toward the muzzle and remove it*



**Fig.10**



**Fig.11**



## REMOVING AND DISASSEMBLING THE BOLT GROUP

### Removing

After the barrel and fore-end are completely removed from the receiver. Push the carrier latch button by holding the bolt handle, and release it to the forward position. Take out the bolt handle by pulling it out (Fig.12). And pull the bolt assembly out of the receiver, sliding it along its guides (Fig.13).

### Disassembling

While holding the firing pin and firing pin spring in place, remove the firing pin retaining pin from the bolt assembly (Fig.14).

Remove the firing pin and firing pin spring from the bolt (Fig.15). Remove the locking head pin from the locking head. Pull the locking head from the bolt body. (Fig.16) Remove the inertia spring from its seat in the bolt and drop it into your palm (Fig.17).



Fig.12



Fig.13



Fig.14



Fig.15



Fig.16



Fig.17

## REMOVING AND REINSTALLING THE TRIGGER GROUP

### Removing

*Make sure that you removed the bolt group from the receiver. In order to remove the trigger group, push the receiver pin through the receiver and remove it by using an appropriate punch(Fig.18). While pushing the carrier latch button, push the trigger group forward and remove it(Fig19).*

### Installing

*After cleaning and lubricating the trigger group, it is reinstalled by pressing the carrier latch button while pushing the trigger group rearward. Align the hole in the trigger group with the hole for the receiver pin, and reinstall the receiver pin.*



**Fig.18**



**Fig.19**

## ASSEMBLING AND INSTALLING THE BOLT GROUP

### Assembling

*Insert the inertia spring in, it seats in the bolt (Fig.20) Insert the locking head into the bolt body(Fig.21) Insert the locking head pin in its hole onto the locking head's stem(Fig.22) Make sure than the reference line on the top of the locking head pin is visible and aligned with bolt's centerline Insert the firing pin and the firing pin spring inside the bolt(Fig.23).*

*Insert the firing pin retaining pin in its seat, in order to block the firing pin move out(Fig.24).*

### Installing

*Insert the bolt assembly inside the receiver by sliding it along it guides. Make sure that bolt link fit to the recoil spring cap*



**Fig.20**



**Fig.21**



**Fig.22**



**Fig.23**



**Fig.24**

## REMOVING AND REINSTALLING THE PR MO CHOKE TUBES

Unload the gun and make sure that the safety is "on" position. Remove your choke by inserting the choke key, and turning it counter clockwise. After cleaning and lubricating, a choke tube may be reinstalled by starting the threads by hand, than tightening the choke tube with choke key(Fig25) Consult the choke value chart for suggested values.

## REMOVING THE MAGAZINE PLUG

Since the hunting regulations in some countries and areas limit the number of cartridges allowed in the magazine, this shotgun comes with a limiter plug installed in magazine tube that reduces the capacity of to magazine tube to two cartridges. To remove this plug, follow the direction below. Unscrew and remove the fore-end nut. Remove the magazine plug from the end of the magazine tube(Fig 26) Replace the fore-end nut by screwing it into place



**Fig.25**



**Fig.26**

## CHANGING THE DROP (IF YOUR SHOTGUN INCLUDES)

In order to accommodate all shooters' needs, however, a Drop Change Kit is included as standard

This kit provides drops of 50,60, and 65 mm and consists of tree drop adjustment shims Each shim is marked with its corresponding drop measurement

To accommodate left handed shooters, we have also included a left cast shim marked

To change the drop, follow these instructions

Make sure the gun is unloaded as previously described

Using an ordinary Phillips or crosshead screwdriver, unscrew the butt plate screws (H) to remove the butt plate(G)

Remove the stock remove the retaining nut (D) using a 13 mm socket or hex spanner remove the washer (E) and take off the stock. Now the stock may be removed

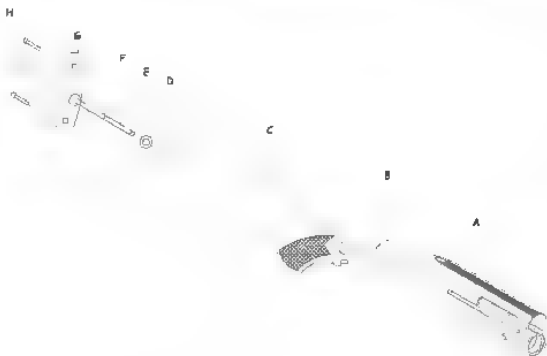
Insert the shim (B) corresponding to the desired drop throught the recoil spring tube until the shim is flush with the receiver

Install the stock and insert the retaining nut(D) with its elastic washer (E)

Tighten the stock retaining nut (D) using the socket or hex spanner

Install the butt plate(G) and insert the screws(H)

**Warning:** After firing a few rounds, check again that the stock is well tightened If necessary, remove the recoil pad and re-tighten the stock nut



## **WARNING**

Never shoot steel shot with a full or improved modified choke. Use only modified, improved cylinder or cylinder chokes (marked tree, four, five, cuts respectively)

Never use cartridges with a case longer than the chamber, as this would have serious consequences for both the gun and the shooter

Never shoot slugs with a full choke, use only the most open choke which is marked with five cuts.

Do not use 3 1/2" cartridges (Supermagnums) in this shotgun

Never shoot without the choke tube fitted in the barrel

## **MAINTENANCE**

Proper maintenance is one of the most important facets in assuring the level best performance of the gun as well as the highest level of safety to the shooter

- \* Before using the shotgun, make sure that barrel is clean and free of any grease or obstruction.
- \* After each shooting session, dismantle the barrel, the choke tube and the bolt mechanism for cleaning and lubricating.
- \* If the gun is used on a wet day, be sure to dry the gun and the wooden parts in a ventilated area.
- \* Do not store the gun in a gun case or gun slip if not perfectly dry
- \* Storage of the gun in a plastic or synthetic case or slip for a long time is not suitable






## **SPARE PARTS LIST**

To order spare parts you must specify the model, the gauge and the serial number of your shotgun as well as the reference number of the spare parts found in the following tables

## WHAT'S PRIMO® CHOKE?

The purpose of multi choke is to make barrel's tip narrowed down to shoot for and more collectively or to enlarge barrel's tip to shoot more wider pattern for small shots.

### CHOKE TYPE AND AREAS USED FOR MATRIX ~~hne-sys~~® SHOTGUN

|          | CHOKE TYPE                                  | SYMBOL  | GAME  | PELLET SIZE                | USEFUL SHOOTING DISTANCE |
|----------|---|---|---|----------------------------|--------------------------|
| <b>1</b> | <b>*</b><br><b>FULL</b>                     |  | <i>Goose, Duck, Wood Grouse<br/>For long range hunting with lead<br/>shot and tight groups.</i>                       | <i>1-2-3</i>               | <i>50-56<br/>meters</i>  |
| <b>2</b> | <b>**</b><br><b>IMPROVED<br/>MODIFIED</b>   |  | <i>Duck, Pheasant, Wood Grouse, Rabbit.</i>   | <i>4-5-6</i>               | <i>41-44<br/>meters</i>  |
| <b>3</b> | <b>***</b><br><b>MODIFIED</b>               |  | <i>Partridge, Pheasant, Quail, Pigeons,<br/>Woodcock. For long range hunting<br/>with lead shot and tight groups.</i> | <i>5-6-7-8</i>             | <i>31-41<br/>meters</i>  |
| <b>4</b> | <b>****</b><br><b>IMPROVED<br/>CYLINDER</b> |  | <i>Quail, Dove and target shooting<br/>For shooter distance more open shooting.</i>                                   | <i>7-8-9-10-<br/>11-12</i> | <i>30-35<br/>meters</i>  |
| <b>5</b> | <b>*****</b><br><b>SKEET</b>                |  | <i>For sporting clay and skeet shooting.<br/>Short distances more open shooting.</i>                                  | <i>7-8-9-10-<br/>11-12</i> | <i>20-30<br/>meters</i>  |

#### WARNING:

Do not use

choke values

1, 2 or 3 with

slugs,

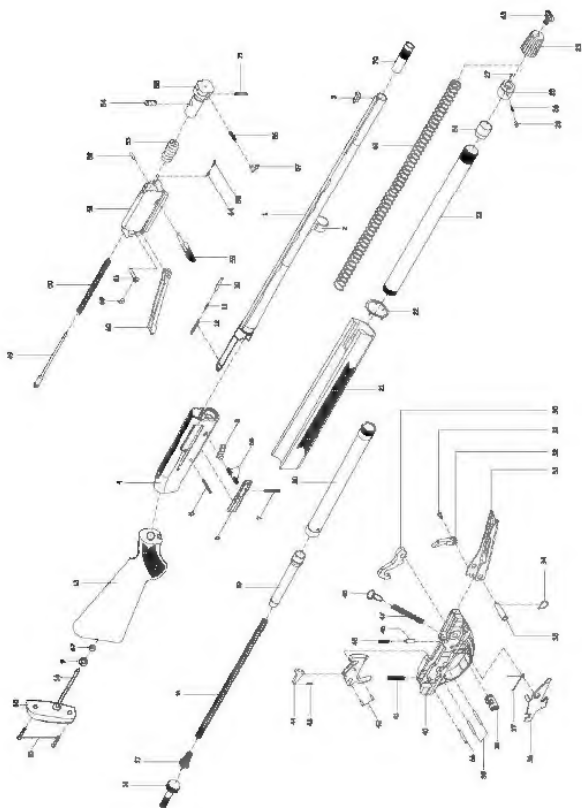
single projectiles.

Do not use choke

value 1 or 2

with steel shot.

**WARNING:** Never shoot steel shot with a full or improved modified choke, use only modified, improved cylinder or skeet chokes (marked three, four, five cuts respectively). Do not use chokes full improved modified and (marked one, two, three cuts) with slugs, single bullets or single projectiles. Never use cartridge with a case longer than the chamber, as this would have serious consequences for bolt the gun and the shooter. Do not use 3 1/2" cartridges (Super magnum) in this shotgun. Never shot without the choke tube fitted on the barrel.





## GENERAL ASSEMBLY

|                                |                                      |                                 |
|--------------------------------|--------------------------------------|---------------------------------|
| 1 BARREL                       | 25 MAGAZINE FOLLOWER ( long )        | 49 FIRING PIN                   |
| 2 BARREL RING                  | 26 MAGAZINE FOLLOWER SIDE PIN SPRING | 50 FIRING PIN SPRING            |
| 3 PRONT SIGHT                  | 27 FOREND LOCK                       | 51 BOLT                         |
| 4 RECEIVER                     | 28 MAGAZINE FOLLOWER SIDE PIN        | 52 BOLT HANDLE PIN              |
| 5 RECEIVER PIN                 | 29 MAGAZIN CAP                       | 53 BOLT INERTIA SPRING          |
| 6 CARRIER LATCH                | 30 HAMMER                            | 54 LOCKING HEAD PIN             |
| 7 CARRIER LATCH PIN            | 31 BREECH BOLT LATCH PIN             | 55 LOCKING HEAD                 |
| 8 CARRIER LATCH PLATE          | 32 BREECH BOLT LATCH                 | 56 EXTRACTOR SPRING             |
| 9 RECOIL PAD SCREW WASHER      | 33 CARRIER                           | 57 EXTRACTOR                    |
| 10 CARTRIDGE EJECTOR           | 34 HAMMER BUSH RING                  | 58 BOLT HANDLE RETAINING SPRING |
| 11 EJECTOR PIN SPRING          | 35 HAMMER BUSH                       | 59 BOLT HANDLE                  |
| 12 EJECTOR PIN                 | 36 CARTRIDGE DROP LEVER              | 60 BOLT LINK                    |
| 13 STOCK                       | 37 CARTRIDGE DROP LEVER SPRING       | 61 BOLT LINK PIN                |
| 14 STOCK BOLT                  | 38 MANUAL SAFETY BUTTON              | 62 MAGAZINE SPRING              |
| 15 STOCK/RECOIL PAD SCREWS     | 39 TRIGGER PINS                      | 63 SLING SWIVEL                 |
| 16 STOCK RETAINING NUT SCREW   | 40 TRIGGER AGUARD                    | 64 BOLT HANDLE PIN              |
| 17 REBOUNDING RECOIL SPRING    | 41 TRIGGER SPRING                    | 65 BUTT PAD                     |
| 18 STOCK TUBE SPRING           | 42 DISCONNECTOR PIN                  | 66 TRIGGER SPRING PIN           |
| 19 RECOIL SPRING PLUNGER       | 43 DISCONNECTOR SPRING               | 67 STOCK RETAINING NUT          |
| 20 STOCK TUBE                  | 44 DISCONNECTOR                      | 68 CARRIER LATCH PLATE PIN      |
| 21 FOREND                      | 45 MANUAL SAFETY SPRING              | 69 FIRING PIN O-RING            |
| 22 FOREND PROTECTION INSERT    | 46 MANUAL SAFETY SPRING PIN          | 70 PRIMO MOBILE CHOKE           |
| 23 MAGAZINE TUBE               | 47 HAMMER SPRING                     | 71 EXTRACTOR PIN                |
| 24 MAGAZINE FOLLOWER ( short ) | 48 HAMMER SPRING TOP PIN             |                                 |



**KHAN ARMS**

**Kayhan Av Tüfekleri San. Ve Dış Tic. Ltd. Şti.**

Yeni Sahra Mah. Necla Sk. No:22 Ataşehir / İstanbul

Tel: +90 216 632 75 55 Fax : +90 216 632 74 44

[www.khanarms.com](http://www.khanarms.com)